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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,415	08/21/2001	Brendan J. Kitts	VIGN1160-1	8220

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EXAMINER

ZHOU, TING

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,415

Applicant(s)

KITTS, BRENDAN J.

Examiner

Ting Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Request for Continued Examination (RCE) filed on 31 January 2006 under 37 CFR 1.53(d) based on parent Application No. 09/934,415 is acceptable and a RCE has been established. An action on the RCE follows.
2. The amendments filed on 31 January 2006, submitted with the filing of the RCE have been received and entered. Claims 1-18 as amended are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant claims that the retail items are “freely associated” and further explains that freely associated retail items have no predetermined relationship associations with other retail items, on page 9 of the remarks filed on 31 January 2006. However, the applicant’s original disclosure does not provide any adequate descriptive support for “freely associated” retail items”. The applicant points to paragraph 0006 of the specification as providing support for the limitation. However,

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paragraph 0006 of the specification merely mentions that there can be many potential cause-effect relations between retail items; this mention of the possible cause-effect relations does not amount to a description of retail items that are “free” and do not have predetermined relationships with other items. There are no teachings of “freely associated” retail items nor the property that retail items do not have predetermined relationship associations in paragraph 0006 of the specification or elsewhere in the original disclosure.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term “freely associated” in claims 1, 12, 13 and 14 is a relative term which renders the claim indefinite. The term “freely associated” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Since there is no definition or standard provided in the claim or specification of the application, one of ordinary skill in the art would not be able to determine what constitutes “freely associated retail items”, i.e. distinguish between what retail items are “freely” associated and what retail items are not “freely” associated.

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Claims 2-11 and 15-18 are dependent upon claims 1 and 14, and are rejected for similar reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toong et al. U.S. Patent 6,604,114 (hereinafter "Toong") and Jammes et al. U.S. Patent 6,484,149 (hereinafter "Jammes").

Referring to claims 1, 12, 13 and 14, Toong teaches a system and method comprising a computer having memory capable of operating pursuant to instructions comprising an algorithm (Toong: Figure 1), wherein the instructions comprise instructions executable to: load an interaction metric between items into memory (the software system collects information/criteria in response to user query), optimize placement of nodes and edges pursuant to the interaction metric (display an optimized graphic representation of data items in response to the query, with the data items arranged in relationship to each other) (Toong: column 3, lines 16-60, column 5, lines 1-27 and Figure 4); and generate a graphical representation of the nodes and edges with corresponding interaction metrics (nodes and edges/links representing retrieved documents and relationships between documents retrieved in response to the search query

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criteria) (Toong: column 3, lines 16-60, column 5, lines 1-27, column 7, lines 57-67 and Figure 4). However, although Toong teaches nodes representing items and linked edges representing interactions, or relationships between the items, Toong fails to explicitly teach the interaction metric between items are retail items and the items represented by the nodes and edges are retail items. Jammes teaches graphically displaying nodes representing items and edges representing the relationships between the items (as shown on the left hand side of the interface in Figure 4, nodes, such as folders represent items such as "Clothing", "Automotive", "Computer", etc. and edges, or the hierarchical tree-like structures between the items represent the interactions, i.e. parent-child relationships, between those items) similar to that of Toong. In addition, Jammes further teaches the interactions between retail items and the items represented by the nodes and edges are retail items (the items are products, such as cars, computers, etc. and the interaction, i.e. relationships between the retail items are shown via the hierarchical display) (Jammes: column 30, lines 30-39 and Figure 4). It would have been obvious to one of ordinary skill in the art, having the teachings of Toong and Jammes before him at the time the invention was made, to modify the optimization and display of nodes and edges representing items according to the interactions between items taught by Toong to include the display of relationships between items in a retail setting of Jammes. One would have been motivated to make such a combination in order to provide a convenient and efficient tool that is well suited to the task of developing and managing the content of an electronic store. With the increasing popularity and accessibility of the Internet, the number of merchants using and desiring to use the World Wide Web to advertise and sell

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products is growing rapidly. Therefore, this combination will produce an electronic shopping system that provides a clear and optimized view of products and merchandise.

Referring to claims 2 and 15, Toong, as modified, teach the interaction metric being a conditional probability (the interaction metric of using the search query to retrieve data elements can be based on a weighting factor that adds statistical measures) (Toong: column 6, lines 32-36).

Referring to claim 3, Toong, as modified, teach the interaction metric being based on correlations between items (using the search query of parameters, i.e. correlations of data records in order to create the graphical depiction of the data records) (Toong: column 3, lines 18-60).

Referring to claims 4 and 16, Toong, as modified, teach the interaction metric comprising at least one of a cross-elasticity and cross-correlation between two different variables (using the search query of parameters, i.e. relationships/correlations between data records in order to create the graphical depiction of the data records) (Toong: column 3, lines 18-60).

Referring to claims 5, 10, 11 and 17, Toong, as modified, teach the optimum placement of nodes and edges adheres to at least one of minimizing number of crossings between edges, distance between linked nodes is minimized, graph area is minimized, horizontal and vertical symmetries are maximized, and an angle between two edges onto a node is greater than or equal to a predetermined constant (nodes and links are placed to minimize the amount of crossings) (Toong: column 3, lines 48-55).

Referring to claim 18, Toong, as modified, teach there are multiple paths from at least one node to at least one other node (as shown in Figure 4 of Toong, nodes can be reached from another node via multiple paths and links).

6. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toong et al. U.S. Patent 6,604,114 (hereinafter "Toong") and Jammes et al. U.S. Patent 6,484,149 (hereinafter "Jammes"), as applied to claim 1 above, and Weinberg et al. U.S. Patent 6,144,962 (hereinafter "Weinberg").

Referring to claims 6-9, Toong and Jammes teach all of the limitations as applied to claim 1 above. Specifically, Toong and Jammes teach the display of node-link relationships for elements based on interaction metrics (displaying a graphical depiction of data elements in node-link relationships with each other in response to an interaction metric such as user query of data elements that meet a certain criteria) (Toong: column 3, lines 16-60, column 5, lines 1-27, column 7, lines 57-67 and Figure 4). However, Toong and Jammes fail to explicitly teach if the interaction metric is below a predetermined threshold the interaction between at least one of the below-threshold item and an edge is not graphically displayed. Weinberg teaches displaying node-link relationships for elements based on interaction metrics (Weinberg: column 2, lines 32-48) similar to that of Toong and Jammes. In addition, Weinberg further teaches not displaying the interaction if the interaction metric is below a predetermined threshold (only displaying links that are above a minimum activity threshold level) (Weinberg: column 28, lines 56-67 and column 9, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Toong, Jammes and Weinberg before him at the time the

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invention was made, to modify the method and system for displaying items based on their interactions of Toong and Jammes to include displaying only the interactions that are above a certain threshold, as taught by Weinberg. One would have been motivated to make such a combination in order to avoid cluttering the display space with unimportant or non-relevant information, providing more space and focus for important information.

Response to Arguments

7. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TZ

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